UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,623	12/15/2000	Angelo Rizzardi	1999US001	2169

7590 08/29/2002

CLARIANT CORPORATION
Industrial Property Department
4331 Chesapeake Drive
Charlotte, NC 28216

EXAMINER
KUMAR, PREETI

ART UNIT	PAPER NUMBER
1751	4

DATE MAILED: 08/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/738,623	RIZZARDI ET AL.	
	Examin r	Art Unit	
	Preeti Kumar	1751	

-- The MAILING DATE of this communication appears on th cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *1-15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2,3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-30 are pending.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-15, drawn to a process for pre-treating a cellulosic or cellulose blends with synthetic fiber, classified in class 252, subclass 102.

II. Claims 16-30, drawn to a composition for pre-treating a cellulosic or cellulose blends with synthetic fiber, classified in class 8, subclass 116.1.

3. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition as claimed can be used in a materially different process such as in washing dishes in an automatic dishwashing machine.

4. During a telephone conversation with Scott Hanf on Friday, August 2, 2002 a provisional election was made with traverse to prosecute the invention of group II, claims 16-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claims 18 and 22 are objected to because of the following informalities: Specifically, the phrase ("owg") or ("owb") renders the claim indefinite because it is unclear whether the limitation(s) within the parenthesis are part of the claimed invention. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 16-22 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bragg (US 4,430,243).

Bragg teaches a laundry bleaching and detergent compositions comprising a peroxygen bleaching agent and a catalyst system comprising a heavy metal cation of defined bleach catalytic activity, particularly copper, iron or manganese cations, an

auxiliary metal cation having little or no bleach catalytic activity, particularly zinc or aluminum cations, and a sequestrant having defined stability constants for the catalytic and auxiliary metal cations, particularly ethylenediaminetetraacetic acid, ethylenediaminetetra(methylenephosphonic acid) and water-soluble salts thereof. The laundry bleaching and detergent compositions deliver improved bleach performance, particularly at medium to high wash temperatures. See abstract. Also, Bragg teaches suitable magnesium salts include magnesium sulfate, magnesium sulfate heptahydrate, magnesium chloride, magnesium chloride hexahydrate, magnesium fluoride and magnesium acetate. Desirably, the magnesium salt is added to the compositions as part of the aqueous slurry crutcher mix and is then converted to dry granular form, for instance by spray drying. The magnesium salt can provide additional low temperature stain removal benefits. See col.11, ln.55-65.

Specifically regarding claim 17 and 18, Bragg teaches examples of suitable organic alkaline detergency builder salts are water-soluble polycarboxylates such as the salts of nitrilotriacetic acid, lactic acid, glycollic acid, and citric acid. Bragg teaches that the laundry compositions contain from about 5% to about 90% of detergency builder. See col.11, ln. 4-30.

Specifically regarding claim 19 and 20, Bragg teaches suitable sequestraints such as ethylenediaminetetraacetic acid (EDTA), diethylenetriaminepentaacetic acid (DETPA), ethylene-diaminetetra(methylenephosphonic acid) (EDTMP), diethylenetriaminepenta(methylenephosphonic acid) (DETPMP) and alkali metal and alkaline earth metal salts thereof. Other suitable phosphonate sequestrants include

aminotrimethylene phosphonic acid (NTMP) and ethane-1-hydroxy-1,1-diphosphonic acid (EHDP) and their salts. A mixture of EDTA and/or DETPA with EDTMP and/or DETPMP in a molar ratio of from about 1:10 to about 10:1, preferably from about 1:1 to about 5:1 is especially suitable. See col.7, ln.4-34, example I and claim 1.

Bragg teaches, that the composition can be supplemented by all manner of detergent components, either by including such components in the aqueous slurry to be dried or by admixing such components with the compositions of the invention following the dry step. Soil-suspending agents at about 0.1% to 10% by weight such as water-soluble salts of carboxymethyl-cellulose, carboxyhydroxymethyl cellulose, and polyethylene glycols having a molecular weight of about 400 to 10,000 are common components of the present invention. Dyes, pigment optical brighteners, and perfumes can be added in varying amounts as desired. Other materials such as fluorescers, enzymes in minor amounts, anti-caking agents such as sodium sulfosuccinate, and sodium benzoate can also be added. See col.12, ln.5-10.

Specifically regarding claims 26 and 27, Bragg teaches the utility of fatty alcohols (eg hydrogenated tallow alcohol) having from about 10 to 100, preferably 14 to 40, ethylene oxide units, polyethyleneglycols having a molecular weight of from 400 to 40,000, preferably from 1500 to 10,000, and mixtures thereof in a weight ratio of from about 10:1 to about 1:2. Other suitable components of the agglomerates include polydimethylsiloxanes, paraffin oils, paraffin waxes, micro-crystalline waxes, hydrophobic silica etc. The catalytic heavy metal cation and carrier can then be agglomerated with water-soluble salt material. See col.4, ln.15-25.

Specifically regarding claims 28, Bragg teaches in laundry bleaching and detergent compositions, the peroxygen bleaching agent and sequestrant composition are preferably in a weight ratio in the range from about 100:1 to about 10:1, more preferably from about 50:1 to about 15:1. The laundry bleaching and detergent compositions preferably contain from about 0.5 to about 3 mMoles % of auxiliary metal cation, from about 0.01 to about 2, more preferably from about 0.05 to about 1.5 mMoles % of catalytic metal cation and about 0.5 to about 3 mMoles % of sequestrant. For optimum performance, the laundry bleaching and detergent compositions are preferably buffered to a pH in 1% solution of at least about 9.5, preferably at least about 10. Peroxygen bleaching agents suitable for use in the present compositions include hydrogen peroxide, inorganic peroxides and peroxy salts, hydrogen peroxide addition compounds, and organic peroxides and peroxy acids. See col.3, ln.35-50.

However, Bragg does not specifically teach a pretreatment composition comprising a non-foaming scouring/wetting agent selected from ethoxylated / propoxylated fatty alcohol, a peroxide stabilizer, or a Diethylenetriamine penta(methylene phosphonic acid) organo-phosphate based agent, or Diethylenetriamine pentaacetic acid amino-organic acid based agent as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to formulate a composition comprising a non-foaming scouring/wetting agent selected from ethoxylated / propoxylated fatty alcohol, a peroxide stabilizer, or a Diethylenetriamine penta(methylene phosphonic acid) organo-

phosphate based agent, or Diethylenetriamine pentaacetic acid amino-organic acid based agent as recited by the instant claims, because the teachings of Bragg suggest a laundry detergent composition comprising a non-foaming scouring/wetting agent selected from ethoxylated / propoxylated fatty alcohol, a peroxide stabilizer, or a Diethylenetriamine penta(methylene phosphonic acid) organo-phosphate based agent, or Diethylenetriamine pentaacetic acid amino-organic acid based agent as recited by the instant claims. Furthermore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the composition as a pretreatment composition, since Bragg suggests the utility of the composition as a bleaching composition in general and it is well within the skill of one or ordinary skill in the art to pretreat material for improved whiteness and bleaching effect.

9. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bragg as applied to claims 16-22 and 26-28 above, and further in view of Kravetz et al. (US 4,025,453).

Bragg is relied upon as set forth above. However Bragg does not specifically teach a composition comprising gluconic acid as recited by the instant claims.

Kravets et al. teach a stable concentrated liquid and solid cyanamide-activated bleaching composition. See abstract. Kravets et al. teach that cyanamide is a uniquely effective activator for peroxide-based bleaches over a wide range of temperatures, including low temperatures, such as those encountered in home laundering. See col.2, ln.45-50. Kravets et al. teach the utility of various stabilizers can be incorporated into the composition, such as stannates, pyrophosphates, ethylenediamine tetraacetic acid

and its salts and higher homologs, citric acid, acetic acid, gluconic acid and sodium tripolyphosphate. It has also been found that not only does cyanamide under alkaline conditions enhance the bleaching effectiveness of peroxide-based bleaches, but in addition cyanamide-activated peroxide-based bleaches appear to significantly improve the detergency of many conventional detergents, which makes the compositions particularly attractive for use in laundry applications. See col.3, ln. 10-20.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate gluconic acid in the composition taught by Bragg because the teachings of Kravets et al. suggest the utility of gluconic acid in a similar composition used for improving and maintaining whiteness of cellulosic material.

10. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bragg as applied to claims 16-22 and 26-28 above, and further in view of Chapple et al. (US 5,536,441).

Bragg is relied upon as set forth above. However Bragg does not specifically teach a composition comprising pigments such as titanium dioxide as recited by the instant claims.

Chapple et al. teach a bleach catalyst composition comprising a pigment to improve the color of the resulting product, and especially to render its color as white as possible. Chapple et al. teach that titanium dioxide is a particularly preferred pigment, and may be employed at any suitable level such as to give the desired product color, e.g. up to about 30% by weight of the granules, more preferably from about 0.5 to about 10% by weight. In many cases, however, the whiteness of the product may be further

improved by use of a second pigment, especially a blue pigment, in combination with the titanium dioxide. See col.5, ln.20-35.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate titanium dioxide in the composition taught by Bragg because the teachings of Kravets et al. teach the utility of titanium dioxide in a similar composition used for improving and maintaining whiteness of cellulosic material and Bragg suggests the use of pigment optical brightners in general.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 703-305-0178. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-872-9309.

PK
August 20, 2002

Preeti Kumar
Examiner
Art Unit 1751

YOGENDRA N. GUPTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700